

Ohori, David, EMNRD

From: Myers, Kevin, OSE
Sent: Tuesday, August 03, 2010 5:00 PM
To: Ohori, David, EMNRD
Cc: Johnson, Mike S., OSE; Rappuhn, Doug H., OSE
Subject: OSE Comments for proposed La Jara Mesa Mine SAP - MMD Permit No. CI008RN

David,

NM OSE Hydrology has reviewed the Sampling and Analysis Plan (Revised SAP), La Jara Mesa Mine, Laramide Resources (USA) Inc., MMD Permit No. CI008RN. MMD requested OSE review and comment on the SAP dated October 5, 2009 with its multiple revisions. NM OSE received the SAP on July 13, 2010.

As proposed in the SAP, the La Jara Mesa mine will be an underground mine with 22 acres of surface disturbance. The mine will be located about 10 miles northwest of Grants, in Cibola County. According to the SAP, the depth to water is estimated at more than 300 feet below ground surface at the proposed mine facility and mine portal.

1. Page 5, Table 2-2. In column 2, add the direction (East-Northeast) to the 4 to 5 mile distance from the proposed mine portal to the Homestake Mill climate station.
2. Page 18, Section 7.2.1. For the groundwater and springs data used to construct a geologic cross section in the vicinity of the mine, provide detailed documentation of the sources of information used for the springs and water level measurements.
3. Page 23, Section 8.0; Figure 8-1. The terminus of an ephemeral watershed is described as a dune field located about 3 miles west of the mine facilities. Based on the notes to the Dos Lomas USGS 7.5 minute quadrangle, this was partially photo revised in 1995 by the USFS. The map notes state that the 1995 revisions focused on National Forest lands. Previously, the Dos Lomas map underwent photo-revision in 1980 as an update to the 1957 map. The Revised SAP should review this dune field and document the sources, including the year that the USGS 7.5 minute Dos Lomas quadrangle topographic map was revised. OSE agrees that a field check of the drainage is necessary because 2005 aerial photography does not show the dune field as prominent feature.
4. Page 26, Section 8.2.4; Figure 8-1. NM OSE agrees that aerial photographs and field verification are necessary to evaluate ponds/stock tanks, including some about 3 miles west of the mine facility.
5. Page 30, Section 9.0. Provide documentation to support the depth to groundwater beneath the mine facility.
6. Page 30, Section 9.1; Page 31, Section 9.1.3 and Plate 1. The supply well is outside the proposed one-mile radius of the main facilities. The applicant should inventory springs and wells, at a minimum, within one-mile radius of the supply well located in Section 28, T12N, R9W.
7. Page 30, Section 9.0. As written, it's unclear whether the water supply well is an existing well with established water rights or new well. The applicant should provide information regarding the supply well such as the following, well OSE permit number, current owner of water rights for this well, current beneficial use, diversion amount to be used for La Jara Mesa mine, aquifer (or geologic unit) and well record (date drilled, method of drilling, casing diameter, sealants used, well screen interval, filter pack, lithology, total depth, well capacity estimate and water level estimate). This information is necessary for OSE to better evaluate the need for further permits (e.g., application to appropriate underground water in the Bluewater Underground Water Basin) that may be necessary through the District I Water Rights Division office. If there are specific questions regarding potential OSE Water Rights permitting issues, contact the Albuquerque District I office:

Jess Ward, District Supervisor

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8. Page 30, Section 9.1.2. The SAP proposes to collect and analyze one sample from the proposed water supply well during the one year baseline period. Reliance upon one sample as a baseline for this proposed operational mine seems insufficient. Baseline water chemistry that relies upon one sample may not be useful in evaluating the well development, water quality trends and a range of concentrations. The water quality may be useful in determining or confirming the aquifer used by the water supply well. Unless there is some rationale such as existing lab data for this well, NM OSE recommends three samples be collected to ensure that the water quality is representative of baseline conditions.
9. Page 31, Section 9.1.3 and Plate 1. Plate 1 should have lines drawn to identify the proposed investigation area of one-mile radius of the main facilities. A clearly marked Plate 1 would clarify whether the utility corridor would be part of the area.
10. Page 34, Section 10.2.4. Add units after 1,200 in the following sentence "...Point measurements will be made in the western offset (west side of the road) at 1,200 intervals."

If you have any question about the above comments, contact me.

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